



**Hydrometrics, Inc.**  
consulting scientists and engineers

1204 1<sup>st</sup> Ave East  
Kalispell, MT 59901  
(406) 752-2650  
[www.hydrometrics.com](http://www.hydrometrics.com)

August 8, 2016

Russ Vukonich

**Personal Matters / Ex. 6**

RE: RESULTS OF JUNE 2016 RESIDENTIAL WELL SAMPLING EVENT

Dear Russ,

You are receiving this letter as a report regarding the recent sampling of your residential well.

Hydrometrics sampled ten residential wells during June 2016 as part of a sampling program offered by Columbia Falls Aluminum Company (CFAC). All samples were analyzed for Fluoride and Total Cyanide by an independent laboratory—ALS Environmental (ALS) of Salt Lake City, Utah. CFAC is sponsoring the sampling work and providing subsequent reports. The company also is willing to conduct similar sampling for any residential well in Aluminum City. Interested parties should contact CFAC to participate.

Concentrations of cyanide and fluoride in all residential well water samples collected in June 2016 were better than (lower than) the EPA Drinking Water Maximum Contaminant Levels (MCLs) for fluoride (4 mg/L) and cyanide (0.2 mg/L). The results for all ten water samples collected in June 2016 are shown in Table 1 below. Your wells are represented by Site Codes GW01 (1495 Aluminum Drive) and GW02 (1625 North Fork Road) in Table 1 below.

Results that include a less than sign (<) indicate that the concentration is below the level at which the laboratory can reliably detect.

The June sample for GW12 was re-analyzed and subsequently re-sampled to investigate the initial result of 0.0143 mg/L cyanide. Re-analysis of the June sample by ALS and analysis of an additional sample (by two labs) collected in July have all indicated concentrations of cyanide below the level at which the laboratory can reliably detect. The ALS laboratory concluded that the original result was an artifact of analytical noise present near the detection limit. Based on the re-analysis of the June sample, and the ALS lab's subsequent conclusion that its original result was an artifact of analytical noise, and that the July sample analyzed by two labs confirmed concentrations below the detection limit, it is concluded that the concentration of cyanide in the June sample from GW12 was below the detection limit of 0.01 mg/L.

The next sampling event is scheduled for the month of September. You will be contacted to arrange a suitable sampling date.

Should you have any questions regarding these sample results, please contact Greg Davis (Hydrometrics) at (406) 752-2650 or Steve Wright (CFAC) at (406) 892-8211.

**TABLE 1. SUMMARY OF ANALYTICAL DATA – JUNE 2016**  
**RESIDENTIAL WELL SAMPLING**

|   |                                   | Parameter              | Total Cyanide | Fluoride |
|---|-----------------------------------|------------------------|---------------|----------|
|   |                                   | Unit                   | mg/L          | mg/L     |
| Site Code   | Sample Date                       | Result                 | Result        | Result   |
| GW01  | 6/8/2016                          | <0.010                 | 0.10          |          |
| GW02  | 6/8/2016                          | <0.010                 | <0.10         |          |
| GW04  | 6/8/2016                          | <0.010                 | <0.10         |          |
| GW05  | 6/8/2016                          | <0.010                 | <0.10         |          |
| GW06  | 6/8/2016                          | <0.010                 | <0.10         |          |
| GW07  | 6/8/2016                          | <0.010                 | <0.10         |          |
| GW09  | 6/8/2016                          | <0.010                 | 0.15          |          |
| GW12  | 6/8/2016                          | 0.0143                 | <0.10         |          |
| GW12  | 6/8/2016 (Re-analysis)            | <0.010                 | --            |          |
| GW12  | 7/14/2016 (Re-sample, ALS Lab)    | <0.010                 | 0.22          |          |
| GW12  | 7/14/2016 (Re-sample, Energy Lab) | <0.003                 | <0.10         |          |
| GW20  | 6/8/2016                          | <0.010                 | 0.13          |          |
| GW21  | 6/8/2016                          | <0.010                 | <0.10         |          |
| Montana Groundwater Quality Standard (DEQ-7, October 2012)  |                                   | 0.2                    | 4.0           |          |
| US Environmental Protection Agency Maximum Contaminant Level*   |                                   | 0.2                    | 4.0           |          |
| US Public Health Service Recommended Fluoride Concentration in Public Water Supplies to Prevent Cavities (Dental Carries)** |                                   | --                     | 0.7           |          |
| EPA 2014 Site Reassessment Groundwater Background Concentration Range (MW-01 & MW-18)                                       |                                   | 0.0057 J- to 0.0138 J- | 0.1 J         |          |
| EPA 2014 Site Reassessment Groundwater Background Value (3 Times Background Concentration)                                  |                                   | 0.056                  | 0.3           |          |
| City of Columbia Falls Municipal Drinking Water (2014 CCR)***   |                                   | <0.005                 | 0.08          |          |
| City of Kalispell Municipal Drinking Water (2014 CCR)***  |                                   | Not measured           | 0.22          |          |
| City of Whitefish Municipal Drinking Water (2014 CCR)***  |                                   | Not measured           | 0.02          |          |

"J" denotes estimated quantity.

"J-" denotes estimated quantity that is biased low.

\* The EPA Maximum Contaminant Level (MCL) is very stringent. To understand the possible health effects described for many regulated elements, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect (City of Columbia Falls 2014 Consumer Confidence Report (CCR)).

\*\* USPHS (2015). Additional information about safe levels of fluoride in drinking water is available from the US Center for Disease Control and Montana Department of Environmental Quality websites at the following links: <http://www.cdc.gov/fluoridation/> and <http://deq.mt.gov/Water/pws/pws/fluoride>

\*\*\* City water supplies in Flathead Valley do not add fluoride to drinking water, thus the concentrations shown reflect naturally-occurring fluoride concentrations in groundwater in the area.

The "<" symbol indicates that the sample concentration was less than the laboratory detection limit indicated by the adjacent number.

One milligram per liter (mg/L) is equal to one part per million (ppm).

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Davis". The signature is fluid and cursive, with the first name "Greg" and last name "Davis" clearly distinguishable.

Greg Davis, P.E.

Geological Engineer | Hydrometrics, Inc.

Cc:

Steve Wright